

2/12/02

=> file reg
COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
0.15	0.15

FULL ESTIMATED COST

FILE 'REGISTRY' ENTERED AT 16:07:51 ON 12 FEB 2002
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STRUCTURE FILE UPDATES: 11 FEB 2002 HIGHEST RN 391593-47-8
DICTIONARY FILE UPDATES: 11 FEB 2002 HIGHEST RN 391593-47-8

TSCA INFORMATION NOW CURRENT THROUGH July 7, 2001

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Calculated physical property data is now available. See HELP PROPERTIES
for more information. See STNote 27, Searching Properties in the CAS
Registry File, for complete details:
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

The P indicator for Preparations was not generated for all of the
CAS Registry Numbers that were added to the H/Z/CA/CAplus files between
12/27/01 and 1/23/02. Use of the P indicator in online and SDI searches
during this period, either directly appended to a CAS Registry Number
or by qualifying an L-number with /P, may have yielded incomplete results.
As of 1/23/02, the situation has been resolved. Also, note that searches
conducted using the PREP role indicator were not affected.

Customers running searches and/or SDIs in the H/Z/CA/CAplus files
incorporating CAS Registry Numbers with the P indicator between 12/27/01
and 1/23/02, are encouraged to re-run these strategies. Contact the
CAS Help Desk at 1-800-848-6533 in North America or 1-614-447-3698,
worldwide, or send an e-mail to help@cas.org for further assistance or to
receive a credit for any duplicate searches.

=> s 1-1.1/Li and 0-0.99/Ni and 0-0.98/Co and 0.01-0.1/Al and 2/O

78728 1-1.1/LI
15147 0-0.99/NI
13914 0-0.98/CO
5319 0.01-0.1/AL
3695666 2/O

L1 196 1-1.1/LI AND 0-0.99/NI AND 0-0.98/CO AND 0.01-0.1/AL AND 2/O

=> s 1-1.1/Li and 0-0.99/Ni and 0-0.98/Co and 0.01-0.1/Mg and 2/O

78728 1-1.1/LI
15147 0-0.99/NI
13914 0-0.98/CO
8442 0.01-0.1/MG
3695666 2/O

L2 124 1-1.1/LI AND 0-0.99/NI AND 0-0.98/CO AND 0.01-0.1/MG AND 2/O

=> s 1-1.1/Li and 0-0.99/Ni and 0-0.98/Co and 0.01-0.1/Sr and 2/O

78728 1-1.1/LI
15147 0-0.99/NI
13914 0-0.98/CO
7678 0.01-0.1/SR

```

3695666 2/O
L3      15 1-1.1/LI AND 0-0.99/NI AND 0-0.98/CO AND 0.01-0.1/SR AND 2/O

=> s 1-1.1/Li and 0-0.99/Ni and 0-0.98/Co and 0.01-0.1/La and 2/O
      78728 1-1.1/LI
      15147 0-0.99/NI
      13914 0-0.98/CO
      5458 0.01-0.1/LA
      3695666 2/O
L4      4 1-1.1/LI AND 0-0.99/NI AND 0-0.98/CO AND 0.01-0.1/LA AND 2/O

=> s 1-1.1/Li and 0-0.99/Ni and 0-0.98/Co and 0.01-0.1/Ce and 2/O
      78728 1-1.1/LI
      15147 0-0.99/NI
      13914 0-0.98/CO
      3052 0.01-0.1/CE
      3695666 2/O
L5      5 1-1.1/LI AND 0-0.99/NI AND 0-0.98/CO AND 0.01-0.1/CE AND 2/O

=> s 1-1.1/Li and 0-0.99/Ni and 0-0.98/Co and 0.01-0.1/V and 2/O
      78728 1-1.1/LI
      15147 0-0.99/NI
      13914 0-0.98/CO
      1387 0.01-0.1/V
      3695666 2/O
L6      8 1-1.1/LI AND 0-0.99/NI AND 0-0.98/CO AND 0.01-0.1/V AND 2/O

=> s 1-1.1/Li and 0-0.99/Ni and 0-0.98/Co and 0.01-0.1/Ti and 2/O
      78728 1-1.1/LI
      15147 0-0.99/NI
      13914 0-0.98/CO
      5556 0.01-0.1/TI
      3695666 2/O
L7      32 1-1.1/LI AND 0-0.99/NI AND 0-0.98/CO AND 0.01-0.1/TI AND 2/O

=> s 11-17
L8      348 (L1 OR L2 OR L3 OR L4 OR L5 OR L6 OR L7)

=> s 1-1.1/Li and 0-0.99/Ni and 0-0.98/Co and 0.01-0.1/Al and 1.9-1.99/O and
0.01-0.1/F
      78728 1-1.1/LI
      15147 0-0.99/NI
      13914 0-0.98/CO
      5319 0.01-0.1/AL
      3562 1.9-1.99/O
      1150 0.01-0.1/F
L9      3 1-1.1/LI AND 0-0.99/NI AND 0-0.98/CO AND 0.01-0.1/AL AND 1.9-1.9
9/O AND 0.01-0.1/F

=> s 1-1.1/Li and 0-0.99/Ni and 0-0.98/Co and 0.01-0.1/Mg and 1.9-1.99/O and
0.01-0.1/F
      78728 1-1.1/LI
      15147 0-0.99/NI
      13914 0-0.98/CO
      8442 0.01-0.1/MG
      3562 1.9-1.99/O
      1150 0.01-0.1/F
L10     2 1-1.1/LI AND 0-0.99/NI AND 0-0.98/CO AND 0.01-0.1/MG AND 1.9-1.9
9/O AND 0.01-0.1/F

=> s 1-1.1/Li and 0-0.99/Ni and 0-0.98/Co and 0.01-0.1/Sr and 1.9-1.99/O and
0.01-0.1/F

```

```

78728 1-1.1/LI
15147 0-0.99/NI
13914 0-0.98/CO
7678 0.01-0.1/SR
3562 1.9-1.99/O
1150 0.01-0.1/F
L11      0 1-1.1/LI AND 0-0.99/NI AND 0-0.98/CO AND 0.01-0.1/SR AND 1.9-1.9
          9/O AND 0.01-0.1/F

```

```

=> s 1-1.1/Li and 0-0.99/Ni and 0-0.98/Co and 0.01-0.1/La and 1.9-1.99/O and
0.01-0.1/F

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78728 1-1.1/LI
15147 0-0.99/NI
13914 0-0.98/CO
5458 0.01-0.1/LA
3562 1.9-1.99/O
1150 0.01-0.1/F
L12      2 1-1.1/LI AND 0-0.99/NI AND 0-0.98/CO AND 0.01-0.1/LA AND 1.9-1.9
          9/O AND 0.01-0.1/F

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=> s 1-1.1/Li and 0-0.99/Ni and 0-0.98/Co and 0.01-0.1/Ce and 1.9-1.99/O and
0.01-0.1/F

```

```

78728 1-1.1/LI
15147 0-0.99/NI
13914 0-0.98/CO
3052 0.01-0.1/CE
3562 1.9-1.99/O
1150 0.01-0.1/F
L13      0 1-1.1/LI AND 0-0.99/NI AND 0-0.98/CO AND 0.01-0.1/CE AND 1.9-1.9
          9/O AND 0.01-0.1/F

```

```

=> s 1-1.1/Li and 0-0.99/Ni and 0-0.98/Co and 0.01-0.1/V and 1.9-1.99/O and
0.01-0.1/F

```

```

78728 1-1.1/LI
15147 0-0.99/NI
13914 0-0.98/CO
1387 0.01-0.1/V
3562 1.9-1.99/O
1150 0.01-0.1/F
L14      0 1-1.1/LI AND 0-0.99/NI AND 0-0.98/CO AND 0.01-0.1/V AND 1.9-1.99
          /O AND 0.01-0.1/F

```

```

=> s 1-1.1/Li and 0-0.99/Ni and 0-0.98/Co and 0.01-0.1/Ti and 1.9-1.99/O and
0.01-0.1/F

```

```

78728 1-1.1/LI
15147 0-0.99/NI
13914 0-0.98/CO
5556 0.01-0.1/TI
3562 1.9-1.99/O
1150 0.01-0.1/F
L15      0 1-1.1/LI AND 0-0.99/NI AND 0-0.98/CO AND 0.01-0.1/TI AND 1.9-1.9
          9/O AND 0.01-0.1/F

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=> s 19-115

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L16      7 (L9 OR L10 OR L11 OR L12 OR L13 OR L14 OR L15)

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=> s 1-1.1/Li and 0-0.99/Ni and 0-0.98/Co and 0.01-0.1/Al and 1.9-1.99/O and
0.01-0.1/S

```

```

78728 1-1.1/LI
15147 0-0.99/NI
13914 0-0.98/CO
5319 0.01-0.1/AL

```

3562 1.9-1.99/O
915 0.01-0.1/S
L17 0 1-1.1/LI AND 0-0.99/NI AND 0-0.98/CO AND 0.01-0.1/AL AND 1.9-1.9
9/O AND 0.01-0.1/S

=> s 1-1.1/Li and 0-0.99/Ni and 0-0.98/Co and 0.01-0.1/Mg and 1.9-1.99/O and
0.01-0.1/S

78728 1-1.1/LI
15147 0-0.99/NI
13914 0-0.98/CO
8442 0.01-0.1/MG
3562 1.9-1.99/O
915 0.01-0.1/S
L18 0 1-1.1/LI AND 0-0.99/NI AND 0-0.98/CO AND 0.01-0.1/MG AND 1.9-1.9
9/O AND 0.01-0.1/S

=> s 1-1.1/Li and 0-0.99/Ni and 0-0.98/Co and 0.01-0.1/Sr and 1.9-1.99/O and
0.01-0.1/S

78728 1-1.1/LI
15147 0-0.99/NI
13914 0-0.98/CO
7678 0.01-0.1/SR
3562 1.9-1.99/O
915 0.01-0.1/S
L19 0 1-1.1/LI AND 0-0.99/NI AND 0-0.98/CO AND 0.01-0.1/SR AND 1.9-1.9
9/O AND 0.01-0.1/S

=> s 1-1.1/Li and 0-0.99/Ni and 0-0.98/Co and 0.01-0.1/La and 1.9-1.99/O and
0.01-0.1/S

78728 1-1.1/LI
15147 0-0.99/NI
13914 0-0.98/CO
5458 0.01-0.1/LA
3562 1.9-1.99/O
915 0.01-0.1/S
L20 0 1-1.1/LI AND 0-0.99/NI AND 0-0.98/CO AND 0.01-0.1/LA AND 1.9-1.9
9/O AND 0.01-0.1/S

=> s 1-1.1/Li and 0-0.99/Ni and 0-0.98/Co and 0.01-0.1/Ce and 1.9-1.99/O and
0.01-0.1/S

78728 1-1.1/LI
15147 0-0.99/NI
13914 0-0.98/CO
3052 0.01-0.1/CE
3562 1.9-1.99/O
915 0.01-0.1/S
L21 0 1-1.1/LI AND 0-0.99/NI AND 0-0.98/CO AND 0.01-0.1/CE AND 1.9-1.9
9/O AND 0.01-0.1/S

=> s 1-1.1/Li and 0-0.99/Ni and 0-0.98/Co and 0.01-0.1/V and 1.9-1.99/O and
0.01-0.1/S

78728 1-1.1/LI
15147 0-0.99/NI
13914 0-0.98/CO
1387 0.01-0.1/V
3562 1.9-1.99/O
915 0.01-0.1/S
L22 0 1-1.1/LI AND 0-0.99/NI AND 0-0.98/CO AND 0.01-0.1/V AND 1.9-1.99
/O AND 0.01-0.1/S

=> s 1-1.1/Li and 0-0.99/Ni and 0-0.98/Co and 0.01-0.1/Ti and 1.9-1.99/O and
0.01-0.1/S

78728 1-1.1/LI
15147 0-0.99/NI
13914 0-0.98/CO
5556 0.01-0.1/TI
3562 1.9-1.99/O
915 0.01-0.1/S

L23 0 1-1.1/LI AND 0-0.99/NI AND 0-0.98/CO AND 0.01-0.1/TI AND 1.9-1.9
9/O AND 0.01-0.1/S

=> s 117-123

L24 0 (L17 OR L18 OR L19 OR L20 OR L21 OR L22 OR L23)

=> s 18 or L16 or L24

L25 355 L8 OR L16 OR L24

=> s 125

L26 145 L25

=> s 126 and positive and battery

53704 POSITIVE

89846 BATTERY

L27 4 L26 AND POSITIVE AND BATTERY

=> d 127 1-4 ibib

L27 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2001:659457 CAPLUS

DOCUMENT NUMBER: 135:184396

TITLE: Manufacture of **positive** electrode material
for Li-ion **battery**

INVENTOR(S): Liu, Renmin; Wu, Guoliang; Tu, Hailing; Yang, Xinhe;
Huang, Songtao; Lu, Shigang; Jin, Weihua; Yao,
Jianming; Jia, Yulan; You, Zhongyuan

PATENT ASSIGNEE(S): Beijing General Inst. of Non-Ferrous Metals, Peop.
Rep. China

SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 10 pp.
CODEN: CNXXEV

DOCUMENT TYPE: Patent

LANGUAGE: Chinese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	---	-----	-----	-----
CN 1289738	A	20010404	CN 1999-119446	19990927

L27 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2000:839606 CAPLUS

DOCUMENT NUMBER: 134:6914

TITLE: Studies on lithium nickel oxide as **positive**
active material for lithium ion polymer
battery

AUTHOR(S): Inamasu, Tokuo; Katayama, Yoshihiro; Arai, Shigekatsu;
Nakagome, Tatsuji

CORPORATE SOURCE: Research Development Center, Yuasa Corp., Japan

SOURCE: Yuasa Jiho (2000), 89, 44-48
CODEN: YUJIAX; ISSN: 0513-6342

PUBLISHER: Yuasa Koporeshon

DOCUMENT TYPE: Journal

LANGUAGE: Japanese

L27 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1999:147656 CAPLUS

DOCUMENT NUMBER: 130:198781

TITLE: Manufacture of lithium-containing metal oxides for
positive electrode in lithium secondary
battery

INVENTOR(S): Matsui, Yasushi; Shirao, Masatoshi

PATENT ASSIGNEE(S): Showa Denko K. K., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 11060244	A2	19990302	JP 1998-42289	19980224
US 6207325	B1	20010327	US 1998-80346	19980518

PRIORITY APPLN. INFO.:

JP 1997-128930	A	19970519
JP 1997-151182	A	19970609
JP 1998-42289	A	19980224
US 1998-75999	P	19980226

L27 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2002 ACS
 ACCESSION NUMBER: 1999:61684 CAPLUS
 DOCUMENT NUMBER: 130:141596
 TITLE: Development of LiNiO₂ **positive** active materials for lithium-ion batteries
 AUTHOR(S): Nagata, Mikito; Komatsu, Shigeo; Tukamoto, Hisashi; Mizutani, Minoru
 CORPORATE SOURCE: Japan Storage Battery Co. Ltd., Japan
 SOURCE: GS News Tech. Rep. (1998), 57(2), 15-19
 CODEN: GSNTAA; ISSN: 0385-7204
 PUBLISHER: Nippon Denchi K.K.
 DOCUMENT TYPE: Journal
 LANGUAGE: Japanese

=> s 127 1-4 ab
 MISSING OPERATOR L27 1-4
 The search profile that was entered contains terms or nested terms that are not separated by a logical operator.

=> d 127 1-4 ab

L27 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2002 ACS
 AB The process comprises: using cobalt oxides, Li compds., Al compds. and/or Ni compds. as raw materials; batching based on formula Li_xCo_yM_{1-y}O₂, where 0.96 ≤ x ≤ 1.08, 0 ≤ y ≤ 1, and M = Al and/or Ni; milling, loading into a container, sintering in furnace at 500-750.degree. in zone 1 at the moving speed of 0.1-10 cm/min, and at 750-950.degree. in zone 2 s at the same moving speed; and cooling. Preferably, the cobalt oxides are CoO, Co₂O₃, and/or Co₃O₄; the Li compds. are LiNO₃, Li₂CO₃, Li₂C₂O₄, Li₂O, and/or LiOH; the Al or Ni compd. is Al₂O₃, NiO, Al(OH)₃, Ni(OH)₃, Al acetate, Ni acetate, Al(NO₃)₃, Ni(NO₃)₃, Al₃(CO₃)₂, Ni₃(CO₃)₂, Al oxalate, or Ni oxalate; and the sintering is carried out in air. The title process has low prodn. cost and is suitable for large scale prodn.

L27 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2002 ACS
 AB Recently we built and tested a lithium ion polymer **battery** using LiNi_{0.8}Co_{0.15}Al_{0.05}O₂ as the pos. active material to qualify its safety and character. The performance of the **battery** was the same as that with LiCoO₂ except for the capacity. In our safety test, neither venting nor fire was obsd. Currently the use of LiCoO₂ is generally common as the cathode material of a lithium ion **battery**. Although LiNiO₂ is recently gathering attention because of a higher capacity and a lower productive cost, its practical use is delaying due to the doubt on its safety. Recently we built and tested a lithium ion polymer **battery** using LiNi_{0.8}Co_{0.15}Al_{0.05}O₂ as the pos. active material to qualify its safety and character. The performance of the **battery** was the same as that with LiCoO₂ except for the capacity. In our safety test, neither venting nor fire was obsd.

L27 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2002 ACS
 AB The title compds. having .alpha.-NaFeO₂ crystal structure and a general formula LiNi_xCo_yAl_zO₂ where 0.70 ≤ x ≤ 0.85, 0.05 ≤ y ≤ 0.20, 0.10 ≤ z ≤ 0.25, and x+y+z=1.0, the .DELTA.2.theta. is

0.520-0.700.degree. for the peak positions of plane (018) and plane (110) in an X-ray diffraction pattern using CuK.alpha. as energy source. The compds. can be used as pos. electrode materials in a lithium secondary **battery**.

L27 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2002 ACS

AB The effect of partial substitution of Ni in LiNiO₂ for Co and Al on its electrochem. characteristics has been investigated. The Co 20% substitution improved cycle life. XRD study suggested that this was due to the alleviation of the structural deterioration at 4.2 V [vs. Li/Li⁺]. The exothermic reaction peak of Li(Ni_{0.84}Co_{0.16})₁₋₂Al₂O₂ in DSC measurement became broader with increase of the amt. of substituted Al. The Al substitution gave rise to the increase of irreversible capacity at the first cycle. XRD study indicated that this was due to the decrease of the Li occupancy of the 3a site in [Li_{1-.alpha.}(Ni, Co, Al).alpha.]₃a[(Ni, Co, Al)]₃bO₂. The improved synthesis condition for z=0.03 increased the Li occupancy of the 3a site. Li(Ni_{0.84}Co_{0.16})_{0.97}Al_{0.03}O₂ obtained by the improved synthesis condition showed high capacity d. of 185 mAh/g, small irreversible capacity of 25 mAh/g at the first cycle, good cycle life and improved thermal stability.

=> d 127 1-4 kwic

L27 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2002 ACS

TI Manufacture of **positive** electrode material for Li-ion **battery**

ST lithium cobalt aluminum nickel oxide **battery** electrode; cobalt oxide lithium nitrate **battery** electrode; lithium carbonate nickel hydroxide **battery** electrode; lithium oxalate nickel oxide **battery** electrode; lithium hydroxide alumina lithia **battery** electrode

IT Secondary batteries

(lithium; manuf. of pos. electrode material for Li-ion **battery**)

IT **Battery** electrodes

(manuf. of pos. electrode material for Li-ion **battery**)

IT **355412-38-3P**

RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(electrode material; manuf. of pos. electrode material for Li-ion **battery**)

IT 139-12-8, Aluminum acetate 373-02-4, Nickel acetate 553-91-3, Lithium oxalate (Li₂C₂O₄) 554-13-2, Lithium carbonate (Li₂CO₃) 814-87-9, Aluminum oxalate 1307-96-6, Cobaltous oxide, processes 1308-04-9, Cobalt oxide (Co₂O₃) 1308-06-1, Cobalt oxide (Co₃O₄) 1310-65-2, Lithium hydroxide (LiOH) 1313-99-1, Nickel oxide (NiO), processes 1344-28-1, Alumina, processes 7790-69-4 12057-24-8, Lithium oxide (Li₂O), processes 12125-56-3, Nickel hydroxide (Ni(OH)₃) 13473-90-0, Aluminum nitrate (Al(NO₃)₃) 14455-29-9, Aluminum carbonate 15099-34-0, Nickel nitrate (Ni(NO₃)₃) 17237-93-3, Nickel carbonate 20543-06-0, Nickel oxalate 21645-51-2, Aluminum hydroxide (Al(OH)₃), processes
RL: PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)
(starting material; for manuf. of pos. electrode material for Li-ion **battery**)

L27 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2002 ACS

TI Studies on lithium nickel oxide as **positive** active material for lithium ion polymer **battery**

AB Recently we built and tested a lithium ion polymer **battery** using LiNi_{0.8}Co_{0.15}Al_{0.05}O₂ as the pos. active material to qualify its safety

and character. The performance of the **battery** was the same as that with LiCoO₂ except for the capacity. In our safety test, neither venting nor fire was obsd. Currently the use of LiCoO₂ is generally common as the cathode material of a lithium ion **battery**. Although LiNiO₂ is recently gathering attention because of a higher capacity and a lower productive cost, its practical use is delaying due to the doubt on its safety. Recently we built and tested a lithium ion polymer **battery** using LiNi_{0.8}Co_{0.15}Al_{0.05}O₂ as the pos. active material to qualify its safety and character. The performance of the **battery** was the same as that with LiCoO₂ except for the capacity. In our safety test, neither venting nor fire was. . .

ST **battery** cathode lithium nickel oxide; safety **battery**
cathode lithium nickel oxide

IT **Battery** cathodes
Safety

(lithium nickel oxide as cathode material for lithium ion polymer **battery**)

IT Secondary batteries

(lithium; lithium nickel oxide as cathode material for lithium ion polymer **battery**)

IT 143623-51-2, Cobalt lithium nickel oxide Co_{0.15}LiNi_{0.85}O₂
193214-24-3, Aluminum cobalt lithium nickel oxide
Al_{0.05}Co_{0.15}LiNi_{0.80}O₂

RL: DEV (Device component use); USES (Uses)

(lithium nickel oxide as cathode material for lithium ion polymer **battery**)

L27 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2002 ACS

TI Manufacture of lithium-containing metal oxides for **positive**
electrode in lithium secondary **battery**

AB . . . diffraction pattern using CuK.alpha. as energy source. The
comps. can be used as pos. electrode materials in a lithium secondary
battery.

ST aluminum cobalt lithium nickel oxide electrode; secondary **battery**
pos electrode lithium oxide

IT **Battery** electrodes

(manuf. of lithium-contg. metal oxides for pos. electrode in lithium
secondary **battery**)

IT 220760-08-7P, Aluminum cobalt lithium nickel oxide
(Al_{0.12}Co_{0.05}LiNi_{0.83}O₂) 220760-09-8P, Aluminum cobalt lithium nickel
oxide (Al_{0.15}Co_{0.05}LiNi_{0.80}O₂) 220760-10-1P, Aluminum cobalt lithium
nickel oxide (Al_{0.11}Co_{0.07}LiNi_{0.82}O₂) 220760-11-2P, Aluminum cobalt
lithium nickel oxide (Al_{0.11}Co_{0.16}LiNi_{0.73}O₂) **220760-12-3P**,
Aluminum cobalt lithium nickel oxide (Al_{0.1}-0.25Co_{0.05}-0.2LiNi_{0.7}-0.85O₂)

RL: IMF (Industrial manufacture); PREP (Preparation)

(manuf. of lithium-contg. metal oxides for pos. electrode in lithium
secondary **battery**)

L27 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2002 ACS

TI Development of LiNiO₂ **positive** active materials for lithium-ion
batteries

ST **battery** cathode lithium nickel oxide; cobalt lithium nickel
oxide cathode **battery**; aluminum lithium nickel oxide cathode
battery

IT **Battery** cathodes

Lithium secondary batteries

(development of LiNiO₂ pos. active materials for lithium-ion batteries)

IT 12031-65-1, Lithium nickel oxide linio2 113066-89-0, Cobalt lithium
nickel oxide Co_{0.2}LiNi_{0.80}O₂ 116327-69-6, Cobalt lithium nickel oxide
Co_{0.1}LiNi_{0.90}O₂ **220026-82-4**, Aluminum cobalt lithium nickel oxide
(Al_{0.03}Co_{0.16}Li_{0.3}Ni_{0.81}O₂) **220026-87-9**, Aluminum cobalt lithium
nickel oxide (Al_{0.1}Co_{0.14}Li_{0.3}Ni_{0.76}O₂) 220026-92-6, Aluminum cobalt

lithium nickel oxide ($\text{Al}_{0.15}\text{Co}_{0.14}\text{Li}_{0.3}\text{Ni}_{0.71}\text{O}_2$)

RL: DEV (Device component use); USES (Uses)

(development of LiNiO_2 pos. active materials for lithium-ion batteries)